SHTIL'MARK, F.R.

Use of tagging in studying the spreading of murine rodents in small forest areas preliminarily treated with zinc phosphide. Biul. MOIP. Otd. biol. 64 no.2:123-125 Mr-Ap '59. (MIRA 12:10)
(Rodent control) (Zinc phosphide)

SHTIL'MARK, F.R.

"Homing instinct" in murine rodents. Priroda 50 no.1:111 Ja '61.
(MIRA 14:1)

1. Institut lesa i drevesiny Sibirskogo otdeleniya AN SSSR, Krasnoyarsk.
(Rodentia) (Orientation)

SYROYECHKOVSKIY, Ye.Ye.; SOKOLOV, G.A.; SHTIL'MARK, F.R.

Effect of the methods of utilizing hunting grounds on some changes in the Siberian fauna and problems in the reclamation of the commercial resources of taiga. Zool.zhur. 41 no.10: 1459-1468 O '62. (MIRA 15:12)

1. Institute of Geography, Academy of Sciences of the U.S.S.R., Moscow and Institute of Forest and Wood, Siberian Branch of the Academy of Sciences of the U.S.S.R., Krasnoyarsk.
(Siberia--Game and game birds)

SHTIL'MARK, F.R.

Ecology of the chipmunk (Eutamias sibiricus Laxm.) in pine forests of the Western Sayans. Zool. zhur. 42 no.1:92-102 '63.
(MIRA 16:5)

1. Institute of Forest and Wood, Siberian Brance of the Academy of Sciences of the U.S.S.R., Krasnoyarsk.
(Sayan Mountains--Chipmunks)

SHTIL'MARK, F.R.; KHLEBNIKOV, A.I.

Northern pika Ochotona alpina Pall. as a forest pest. Priroda 52 no.8:111-112 Ag '63. (MIRA 16:9)

1. Institut lesa i drevesiny Sibirskogo otdeleniya AN SSSR, Krasnoyarsk.

(Sayan Mountains--Pikas)

SHTIL'MARK, F.R.

Effect of human activity on foci of tick-borne encephalitis in southern Siberia. Med. paraz. i paraz. bol. 34 no.3:271-273 My-Je '65. (MIRA 18:7)

1. Institut lesa i drevesiny Sibirskogo otdeleniya AN SSSR, Krasnoyarsk.

TIKHOMIROV, V.N.; BOGOYAVLENSKIY, G.; SHTIL'MARK, R.

Calendar of noteworthy dates. Geog. v shkole 25 no.2:88-90 Mr-Ap '62. (MIRA 15:2)

(Anniversaries)

SHTIL'MARK, V.V.

New study of the hot gas resort at Yangan-Tau. Vop.kur.fizioter. i lech.fiz. kul't. 23 no.2:188-190 Mr-Ap '58. (MIRA 11:6)

1. Nachal'nik ekspeditsii TSentral'nogo instituta kurortologii.
(YANGAN-TAU--THERMOTHERAPY)

SHTIL'SHTEYN, G.M.

Thermoelectric phenomena on the sun. Part 1: Electrostatic field in the solar corona. Astron.zhur. 38 no.3:463-473 My-Je '61. (MIRA 14:6)

1. Leningradskiy pedagogicheskiy institut imeni Gertsena.
(Sun—Corona) (Thermoelectricity)

L 11189-63 EWT(l)/EWT(m)/FCC(w)/BDS/ES(v) AFFTC/ASD/ESD-3 Pe-4
GW
ACCESSION NR: AP3001242 S/0033/63/040/003/0487/0495

AUTHOR: Shtil'shteyn, G.M.

TITLE: Thermoelectric phenomena on the sun. 2. Thermocurrents in the depths of the solar plasma

SOURCE: Astronomicheskiy zhurnal, v. 40, no. 3, 1963, 487-495

TOPIC TAGS: solar activity, solar magnetic field, sunspots, solar thermoelectric phenomena, solar plasma

ABSTRACT: The possibility of the formation of the local magnetic fields on the sun as a result of thermal currents within the solar plasma is examined. The asymmetry of the system of currents that is required for the formation of a nonzero magnetic field is expected to be the result of a deviation from spherical symmetry in the temperature distribution in the sun. A distribution of temperature and currents is found for a model of the solar plasma comprising two heat sources: A constant and permanent source at the center of the sun and a short-duration source at some distance from the center of the sun. The local magnetic fields resulting from such a configuration are evaluated. The magnetic field strength, H, is proportional to the strength of the second source and the duration

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L 11189-63
ACCESSION NR: AP3001242

of its action. The effect of selfinduction is taken into consideration; if the linear dimensions of the second heat source is assumed to be of the order of 10 km, its temperature 10-sup-7 degrees K, and the duration of its action, t, of the order of 1 hour, the magnetic field strength H is appx. 1 to 10 gauss; with a duration t of appx. 10 sec, H is appx. 10-sup-minus-2 gauss. Observations of the local solar magnetic fields have been performed by the Crimean Observatory since 1957 (Krymsk. astrofiz, observ., Izv., v.20, 1958, 52; ibid., v.19, 1958, 3). Strong local fields and intense field gradients (10-sup-minus-6 gauss/cm) have been recorded between spots only; in weakly active regions weak and slowly changing fields alone were found. The investigations show that the solar magnetic field has a complex multiplet structure. It is possible that the general field of the sun is a secondary effect, a resultant of primary local fields. Many of its properites may be attributed to such a relationship, for example, the changes of the intensity of the field, its direction, its complex structure, polarity changes, etc. There are 14 numbered equations, 2 figures, 1 table. "The author expresses his gratitude to V.A.Krat for valuable advices and constant interest in the work."

ASSOCIATION: Institut teplofiziki Sibirskogo otdeleniya Akademii nauk SSSR

Card 2/3

L 11189-63
ACCESSION NR: AP3001242

(Institute of Thermophysics, Siberian Division, Academy of Sciences, SSSR)

SUBMITTED: 11Apr62 DATE ACQD: 01Jul63 ENCL: 00

SUB CODE: AS, PH NO REF SOV: 009 OTHER: 015

ls/
Card 3/3

VAN'YAN, L.L.; TEREKHIN, Ye.I.; SHTIMMER, A.I.

Method for calculation of frequency sounding wave curves.
Prikl.geofiz. no.30:92-102 '61. (MIRA 14:10)
(Electric prospecting)

IPPO, Boris Borisovich; TURCHANINOV, Nikolay Nikolayevich[deceased]; SHTIN, Aleksey Nesterovich; LEVONEVSKAYA, L.G., tekhn. red.

[The Karelian Isthmus]Karel'skii peresheek. Leningrad, Lenizdat, 1962. 422 p. (MIRA 16:1)
(Karelian Isthmus—Guidebooks)

AUTHORS: Demenev, N. V., Milyutina, M.I., Sharova, A. K. and Shtin,A.P. 267

TITLE: Preparation of an Acid Sulphate of Trivalent Titanium. (O poluchenii kisloy sernokisloy soli trekhvalentnogo titana).

PERIODICAL: "Zhurnal Neorganicheskoy Khimii" (Journal of Inorganic Chemistry, Vol.II, No.2, pp.465-467 (U.S.S.R.) 1957

ABSTRACT: The formation of a violet-coloured crystalline precipitate in quantities strongly dependent on sulphuric-acid concentration was observed when working with reduced acid solutions of titanium. To determine the composition of the precipitate and elucidate the conditions leading to its formation was the object of the work described. The solutions used contained either 15.25, 25.0 or 37.5 g/litre of TiO_2 initially, and the final contents of this and of sulphuric acid were determined. The results are tabulated and indicate that with 700 - 100 g/litre of H_2SO_4 precipitation occurs to 90-97%. Analysis of the salt prepared with careful exclusion of oxidation gave the composition $Ti_2(SO_4).H_2SO_4.8H_2O$. It is a crystalline powder soluble in water, dilute sulphuric and hydrochloric and concentrated sulphuric acids. It is recommended as a source of trivalent titanium for analytical work. There are three references, one of which is Russian. 1 Table.

Received April 26, 1956.

Card 1/1

SHTIN, A.P.

Tantalum phosphate. Izv. Sib. otd. AN SSSR no.7:29-32 '58.
(MIRA 11:9)

1.Ural'skiy filial AN SSSR.
(Tantalum phosphates)

SHAROVA, A.K.;SHTIN, A.P.

Niobium phosphates. Izv. Sib. otd. AN SSSR no.9:40-47 '59 (MIRA 13:3)

1. Ural'skiy filial AN SSSR.
(Niobium phosphates)

SHTIN, A.P.; SHAROVA, A.K.

Tantalum phosphate. Report No.2. Izv.Sib.otd.AN SSSR no.10: 87-94 '59. (MIRA 13:4)

1. Ural'skiy filial Sibirskogo otdeleniya AN SSSR.
(Tantalum phosphate)

SHTIN, A.P.

Niobium phosphate and its hydrates. Izv. Sib. otd. AN SSSR no. 3:68-74 '61. (MIRA 14:5)

1. Ural'skiy filial AN SSSR, Institut khimii, Sverdlovsk.
(Niobium phosphate)

SHTIN, A.P.

Phosphoric acid salt of tantalum and its hydrates. Izv. Sib. otd. AN SSSR no.7:66-71 '61. (MIRA 14:8)

1. Ural'skiy filial AN SSSR, Sverdlovsk.
(Tantalum phosphate)

S/828/62/000/000/
E039/E420

AUTHORS: Shtin, A.P., Sharova, A.K.

TITLE: Investigation of the physico-chemical properties of phosphoric acid compounds of niobium and tantalum and their separation

SOURCE: Razdeleniye blizkikh po svoystvam redkikh metallov. Nezhvuz. konfer. po metodam razdel. blizkikh po svoyst. red. metallov. Moscow, Metallurgizdat, 1962, 107-115

TEXT: Complexes of Ti-Nb-Ta usually contain phosphorus. In order to determine the effect of phosphorus on the behaviour of these metals the properties of the phosphoric acid compounds of Nb and Ta were investigated. Nb and Ta precipitated from solution in sulphuric acid by the action of phosphate ions can be presented in the form: $2Me_2O_5 \cdot P_2O_5 \cdot 6H_2O$ (where Me is Nb or Ta). The dehydration of these phosphates is shown to be a gradual process largely complete at 500°C. However, X-ray diffraction analysis shows that at 800°C in the case of niobium phosphate the composition can be represented by $2Nb_2O_5 \cdot P_2O_5 \cdot 0.85H_2O$ and in the case of tantalum phosphate at 900°C the corresponding formula is

Card 1/2

MILYUTINA, M.I.; SHTIN, A.P.; SHAROVA, A.K.

Studying the interaction of trivalent titanium sulfate with sulfuric acid. Titan i ego splavy no.5:301-396 '61. (MIRA 15:2)
(Titanium--Metallurgy)

ACCESSION NR: AT4042099 S/2768/63/000/007/0101/0106

AUTHOR: Sharova, A. K., Shtin, A. P.

TITLE: The behavior of niobium and tantalum phosphates with respect to various acid reagents

SOURCE: AN SSSR. Ural'skiy filial. Institut khimii. Trudy*, no. 7, 1963. Khimiya i tekhnologiya redkikh metallov (Chemistry and technology of rare metals), 101-106

TOPIC TAGS: niobium, tantalum, niobium purification, niobium phosphate solubility, tantalum phosphate solubility, selective extraction, oxalic acid, hydrogen peroxide

ABSTRACT: The solubility of niobium and tantalum phosphates, alone and combined, in 2.3-13.6 N H_3PO_4, 22.5-81.0 g/liter of $(COOH)_2$, 6, 9, and 12 N HCl, 3, 18 and 36N H_2SO_4, and combinations of H_2SO_4 + 1-7 H_2O_2 or 4% $(COOH)_2$, or HCl + 1-4% $(COOH)_2$, was determined in order to explore the possibility of their selective extraction from a mixture. The salts, separately or combined, were treated with a measured volume of solvent without heating, the undissolved residue was separated by filtration, and the filtrate was analyzed for Nb and Ta. The two phosphates showed insignificant solubility in HCl.

1/2

Card

ACCESSION NR: AT4042099

Although Ta phosphate is much more soluble than Nb phosphate in high concentrations of H_3PO_4, this could not be used for its selective extraction; in the other solvents and combinations, the Nb phosphate was more soluble. Addition of 1-7% H_2O_2 to H_2SO_4 sharply increased the solubility of the phosphates, but their weight ratio in the filtrate remained constant at about 1:10.7. Selective extraction of mobium phosphate could be achieved only by treatment with a solution of HCl plus 1-4% $(COOH)_2$ in which Ta is insoluble, although with H_2SO_4 + 4% $(COOH)_2$ the Nb:Ta ratio in the filtrate was 133:1. Orig. art. has: 2 figures and 6 tables.

ASSOCIATION: Institut khimii, Ural'skiy filial AN SSSR (Chemical Institute, Urals Branch of the AN SSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: IC, MM

NO REF SOV: 008

OTHER: 008

2/2

Card

SHTIN, A.Ye., kand.tekhn.nauk

Drive of a plunger pump with a chains-type variable speed governor. Trudy LTIKHP 6:74-87 '54. (MIRA 11:5)
(Chains) (Governors (Machinery))

SHTIN, A.Ye., kand.tekhn.nauk

Bases for choosing permissible stresses under variable loads.
Trudy LMTIKHP 6:96-109 '54. (MIRA 11:5)
(Strains and stresses)
(Metals at low temperatures)

L 1359-66 EWT(m)/EWP(t)/ EWP(k)/EWP(b)/EWA(h)/EWA(c) JD/HW
ACCESSION NR: AP5024359 UR/0286/65/000/015/0024/0024
621.984.2

36
B

AUTHOR: Yefimov, L. A.; Sysoyev, P. M.; Pylaykin, P. A.; Shtin, L. M.; Khirdzhiyev, S. G. 44,55 44,55 44,55 44,55 44,55

TITLE: A multilayer container for the extrusion process. Class 7, No. 173195 44,55 15

A

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 24

TOPIC TAGS: metal extrusion, metallurgic process

ABSTRACT: This Author's Certificate introduces a multilayer container for the extrusion process. The device is built up from several hoops fitted concentrically one over the other. To economize on costly steels and lighten the container, spacers are placed between two or several pairs of hoops. These spacers are made in the form of hoops which are cut away in one or several places along the generatrix.

ASSOCIATION: none
SUBMITTED: 27Mar64 ENCL: 01 SUB CODE: IE, MM
NO REF SOV: 000 OTHER: 000

Card 1/2

L 1359-66

ACCESSION NR: AP5024359

ENCLOSURE: 01

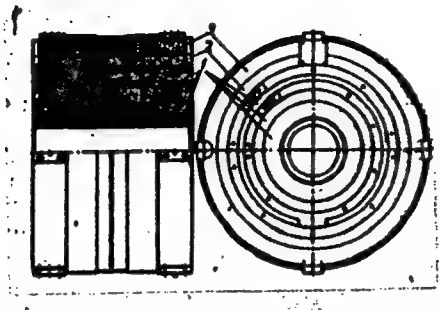

Fig. 1. 1--hoops; 2--spacer; 3--outside hoop

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KUZINA, A.I.; MUKHAROVA, L.S. Prinimali uchastiye: VLADIMIROVA, A.I.; ARKATOVSKIY, P.A.; IL'INA, D.A.; SHTIN, V.M.

Natural tularemia foci in Kemerovo Province. Trudy Tom NIIVS 12:43-47 '60 (MIRA 16:11)

1. Kafedra epidemiologii Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta i Kemerovskaya oblastnaya sanitarno-epidemiologicheskaya stantsiya.

*

1. SHTIN, YE. L.

2. USSR 600

4. Plankton - Kirov Province

7. Microflora of certain reservoirs in Kirov Province, Trudy Gidrobiol, ob-va, 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

KUSHNIRENKO, M.D.; SHTIN, Ye.T.

Studying the mentor effect on the formation of hybrid seedlings as influenced by the position of the graft in the crown [with summary in English]. Fiziol. rast. 5 no.1:42-50 Ja-F '58. (MIRA 11:1)

1. TSentral'naya geneticheskaya laboratoriya im. I.V. Michurina, Michurinsk.

(Grafting) (Fruit trees)

SHTINA, E.A.

Variations of soil algae in crop rotation (in grassy podzol soils).
Biul.MOIP. Otd.biol. 59 no.5:59-69 S-O '54. (MLRA 8:1)
(Algae) (Podzol) (Rotation of crops)

SHTINA, E. A.

SHTINA, E. A. --"Algae of Soddy-podzol Soils and Their Role in Soil Processes." *(Dissertations For Degrees In Science and Engineering Defended at USSR Higher Educational Institutions)(29) Moscow Order of Lenin and Order of Labor Red Banner State U imeni M. V. Lomonosov, Moscow, 1955

SO: Knizhnaya Letopis' No 29, 16 July 1955

* For the Degree of Doctor of Biological Sciences

BOLYSHEV, N.N.; SHTINA, E.A.

In memory of E.A.Manucharova. Bot.zhur.40 no.6:911 N-D '55.
(Manucharova, Ekaterina Alekseevna, 1892-1954) (MLRA 9:4)

Name	SHTINA, Emiliya Adrianovna
Dissertation	Seaweeds of the Turf-Podzolic Soils and their role in the Earth Processes
Degree	Doc Biol Sci
Affiliation	Kirov Agr Inst
Defense Date, Place	11 Jan 56, Council of Botanic Inst imeni Komarov, Acad Sci USSR
Certification Date	15 Dec 56
Source	BMVO 7/57

SHTINA, E.A.

Interaction of algae with higher plants. Vest.Mosk.un. 11 no.6:93-98 Je '56. (MLRA 9:11)

1. Moskovskiy universitet, Kafedra vyesshikh rasteniy.
(Algae) (Rhizosphere microbiology)

SHTINA, E.A.

Method for determining the number of terrestrial algae. Bot. Zhur. 41 no.9:1314-1317 S '56. (MLRA 9:11)

1. Kirovskiy sel'skokhozyaystvennyy institut.
(Algae)

J

USSR/Soil Science - Biology of Soils.

Abs Jour : Ref Zhur Biol., No 22, 1958, 100028

Auth r : Shtina, E.A.
Inst :
Title : The Development of Soil Algae in Sod-Podzolic Soils.

Orig Pub : Pochvovedeniye, 1957, No 3, 12-18

Abstract : The distribution and significance of algae in cultivated sod-podzolic soils of Kirovskaya Oblast' were studied. Perennial and winter plants, possesing a powerful root system with a long-life span, assist in the accumulation in the soil of a great quantity of algae. The cultivation of cereals leads to the development of blue-green and diatoma algae, and the cultivation of legumes leads to the development of green algae. The accumulation of organic substances in sod-podzolic soils reached 260 kg/ha; the soil algae create a premise of additional accumulation of radiant energy. The introduction of

Card 1/2

N

USSR / Weeds and Weed Control.

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 1940

Author : Shtina, E. A.
Inst : Kirovo Agricultural Institute
Title : Effect of Herbicide 2,4-D on Soil Algae

Orig Pub : Tr. Kirovskogo s.-kh. in-ta, 1957, 12, No 24, 29-34

Abstract : In the cultivation of perennial oats a twofold spraying of the plants with 2,4-D (I) was applied: 1 kg/hectare in the stage when the plants were emerging from the ground and 1.5 kg/hectare in the earing phase. There was no noticeable effect on soil algae with doses of I up to 1.5 kg/hectare. In laboratory experiments I was applied in the form of 0.3% and 1% solutions. After the first and second treatments

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N

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 1940

SHTINA, E.A.

Algae from turf-Podzolic soils of Kirov Province. Trudy Bot. inst. Ser. 2 no.12:36-141 '59. (MIRA 12:12)
(Kirov Province--Algae) (Soil micro-organisms)

BOLYSHEV, N.N.; SHTINA, E.A.

Vegetation and soils in the cutoff area of the western part of the Volga Delta. Vest.Mosk.un.Ser.biol., pochv., geol., geog. 14 no.4:63-70 '59. (MIRA 13:6)

1. Kafedra pochvovedeniya Moskovskogo universiteta.
(Volga Delta region--Soils)
(Volga Delta region--Plant communities)

SHTINA, E.A.

Algal communities of basic soil types of the U.S.S.R. and their diagnostic significance. Bot.zhur. 44 no.8:1062-1074 Ag '59. (MIRA 13:2)

1. Kirovskiy sel'skokhozyaystvennyy institut.
(Algae) (Soil micro-organisms)

SHTINA, E.A.

Interrelationships between soil algae and farm crops under different environmental conditions. Nauch. dokl. vys. shkoly; biol. nauki no.1: 75-79 '60. (MIRA 13:2)

1.Rekomendovana kafedroy botaniki Kirovskogo sel'skokhozyaystvennogo instituta.

(RHIZOSPHERE MICROBIOLOG) (ALGAE)

SHTINA, E.A.

Methods of investigating algae as a component part of soil microflora. Pochvovedenie no.5:106-112 My '60. (MIRA 14:4)

1. Kirovskiy sel'skokhozyaystvennyy institut.
(Soil micro-organisms)
(Algae)

SHTINA, E.A.; BOLYSHEV, N.N.

Algae of Solonetz soils. Bot. zhur. 45 no.11:1619-1629 N '60.
(MIRA 13:11)

1. Kirovskiy sel'skokhozyaystvennyy institut i Moskovskiy gosudarstvennyy universitet.
(Algae) (Solonetz soils) (Soil micro-organisms)

SHTINA, E.A.

Participation of soil algae in the nutrition of plants. Trudy Inst. mikrobiol. no.11:130-138 '61 (MIRA 16:11)

*

SHTINA, E.A.; YUNG, L.A.

Use of soil algae in combination with bacterial fertilizers.
Agrobiologiia no.3:424-429 My-Je '63. (MIRA 16:7)

1. Kirovskiy sel'skokhozyaystvennyy institut.
(Soil inoculation) (Algae)

SHTINA, E.A.; BOLYSHEV, N.N.

Algal communities in the soils of arid and desert steppes.
Bot. zhur. 48 no.5:670-680 My '63. (MIRA 17:1)

1. Kirovskiy sel'skokhozyaystvennyy institut i Moskovskiy gosudarstvennyy universitet.

SHTINA, E.A.

Participation of algae in the processes of soil formation.
Izv. AN SSSR Ser. biol. 29 no.1:72-80 Ja-F'64 (MIRA 17:3)

1. State Agricultural Institute, Kirov.

SHTINA, E.A. (Kiyev)

Nitrogen fixation in blue-green algae. Usp. sovr. biol. 56 no. 2, 284-299 S-O '63. (MIRA 17:5)

SHTINA, E.A.

Role of algae in the accumulation of nitrogen in soil. Agrokhimiia no.4:77-83 Ap '64. (MIRA 17:10)

1. Kirovskiy sel'skokhozyaystvennyy institut.

BOLYSHEV, N.N.; SHTINA, E.A.; KONNOVA, Ye.N.

Effect of various salts and their concentrations on algal species. Vest.Mosk. un. Ser. 6: Biol., pochv. 20 no.2:72-80 Mr-Ap '65. (MIRA 18:5)

1. Kafedra pochvovedeniya Moskovskogo universiteta.

SHTINOV, N.A.

Quantitative indexes of the dependence of the state of sheep on weather conditions on mountain pastures during the warm period. Trudy KazNIGMI no.24:110-115 '65. (MIRA 18:10)

SHTINOV, N.A.; KONYUKHOV, N.A.; PAL'KEVICH, S.M.

"Effect of "hot" weather on the milk productivity of cows. Trudy KazNIGMI no.24:116-119 '65. (MIRA 18:10)

MAKAROV, Rostislav Alekseyevich, kand. tekhn. nauk; SHTIPEL'MAN, Il'ya Moiseyevich, inzh.; BAGAYEV, Yuriy Petrovich, st. inzh.; PERFILOV, I.F., inzh., red.

[Electrotensiometer devices in construction] Elektrotenzometricheskie pribory v stroitel'stve. Moskva, Gosstroizdat, 1962. 42 p. (MIRA 16:4)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. 2. Rukovoditel' laboratorii novykh fizicheskikh metodov issledovaniya Nauchno-issledovatel'skogo instituta stroitel'noy fiziki Akademii stroitel'stva i arkhitektury SSSR (for Makarov). 3. Nachal'nik otdela eksperimental'noy avtomatiki i sredstv izmereniy TSentral'nogo eksperimental'nogo konstruktorskogo byuro "Stroymekhavtomatika" Nauchno-issledovatel'skogo instituta organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu Akademii stroitel'stva i arkhitektury SSSR (for Shtipel'man). 4. Otdel eksperimental'noy avtomatiki i sredstv izmereniy TSentral'nogo eksperimental'nogo konstruktorskogo byuro "Stroymekhavtomatika" Nauchno-issledovatel'skogo instituta organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu Akademii stroitel'stva i arkhitektury SSSR (for Bagayev).

(Tensiometers)

5(2) SOV/78-4-4-16/44

AUTHORS: Tur'yan, Ya. I., Shtipel'man, R. Ya.

TITLE: Polarographic Investigation of the Lead Thiocyanate Complexes in Aqueous, Aqueous Methanolic, and Aqueous Ethanolic Solution (Polyarograficheskoye issledovaniye rodanistykh kompleksov svintsa v vodnom, vodnometanol'nykh i vodnoetanol'nykh rastvorakh)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 4, pp 808-812 (USSR)

ABSTRACT: The polarographic method was used to investigate the composition and stability of the lead thiocyanate complexes in aqueous, aqueous methanolic, and aqueous ethanolic solutions with a constant ionic strength of 2 and at 25°. The results are given in tables 1 and 2. The reversibility of the electrode process and the diffusion character of the limit current permit a determination of the composition and the stability constants of the lead thiocyanate complexes to be made. The compositions of the complexes and the stoichiometric stability constants in aqueous methanolic and aqueous ethanolic solutions of varying composition are summarized in tables 4 and 5. It is apparent that the amount of the thiocyanate complex passes through a

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Polarographic Investigation of the Lead Thiocyanate Complexes in Aqueous, Aqueous Methanolic, and Aqueous Ethanolic Solution

maximum in relation to the methanol concentration. In 100% CH_3OH the maximum coordination number is lower than in aqueous solution. In aqueous ethanolic solutions the formation of the thiocyanate complex increases with an increase in the ethanol concentration to 30 and 60% C_2H_5OH. The stability constants of the complexes decrease with an increase in the non-aqueous solvent. For corresponding complexes in aqueous-ethanolic and aqueous methanolic solution have the straight line $pK - \frac{1}{\varepsilon}$ (ε...dielectric constant) in common. This fact shows the dominating effect of ε upon the stability constant K. The stoichiometric stability constants of $[Pb(NO_3)]^+$ were determined in aqueous methanolic and aqueous ethanolic solutions at an ion strength of 2 (Table 6). The constant likewise decreases with an increase in the concentration of the non-aqueous solvent, but in lesser amount than the constant K_1 of the complex $[Pb(CNS)]^+$. Table 3 gives the relationship between the limit current of the lead ions and the height of the mercury reservoir in aqueous methanolic and aqueous ethanolic solutions. There are 2 figures,

Polarographic Investigation of the Lead Thiocyanate Complexes in Aqueous, Aqueous Methanolic, and Aqueous Ethanolic Solution

6 tables, and 2 Soviet references.

ASSOCIATION: Kishinevskiy gosudarstvennyy universitet (Kishinev State University)

SUBMITTED: December 26, 1957

MEL'NIKOV, A.K.; SHTIPEL'MAN, S.D.

Horizontal automatic "Chappuis" machines for strip stamping. Kuz.-shtam. proizv. 4 no.5:34-38 My '62. (MIRA 16:5)
(Sheet metal working machinery)

SHTIPEL'MAN, V.L.

Shtipel'man, V.L. "On the effectiveness of using stocks of socialistic cultivation," Sbornik nauch. trudov (Leningrad Fin. ekon. in-t), Issue 5, 1948, p. 45-68

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

S/032/60/026/05/23/063
B010/B005

5.5910

AUTHOR: Shtipel'man, Zh. V.

TITLE: Spectrum Analysis of White Electrocorundum

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 5, pp. 568-570

TEXT: The author describes a method for the spectrum analysis of granular or pulverized electrocorundum for the content of SiO_2, Fe_2O_3, TiO_2, and Na_2O. The method is based on a method suggested by R. L. Pevzner (Ref. 1) for the analysis of ordinary electrocorundum. First, the spectrum produced by a thin layer of the pulverized sample, is recorded in an a.c. arc, then the spectrum of the sample portion fused into the electrode by means of a condensed spark discharge. The same calibration diagrams can be used for the arc and the spark discharge. On the basis of their composition the samples to be investigated were divided into 4 groups, and corresponding calibration samples were prepared. An ISP-22 spectrograph was used, the arc was generated by a DG-1 generator, and the spark discharge was produced by an IG-3

Spectrum Analysis of White Electrocorundum

S/032/60/026/05/23/063
B010/B005

generator. The electrode was shifted by means of an SD-2 motor. The analytical line pairs used are shown in a Table. A strong influence of the sample composition was observed in the determination of SiO_2 and Fe_2O_3. The influence of sodium begins at a content of $Na_2O > 0.8\%$, which is in agreement with data found by O. P. Malkova and N. K. Rudnevskiy (Ref. 2). A reliable analysis of the calibration samples for Si and Fe at $Na_2O > 0.8\%$ could only be obtained by the spark spectrum. The calibration samples of the group containing free metallic iron in the corundum were analyzed by the arc spectrum. The content of Na_2O was determined for all calibration samples according to a diagram obtained from the arc spectrum. The arithmetical mean error of determination according to the spectrum analysis described is 10% at most (when measuring once). There are 4 figures, 1 table, and 2 Soviet references.

ASSOCIATION: Leningradskiy abrazivnyy zavod "Il'ich" (Leningrad "Il'ich" Abrasives Plant)

Card 2/2

SULLIVAN, [illegible]; KIBIZOV, G.I., red.

[Use of a plasma torch for the analysis of titanium and aluminum-calcium slags] Opyt primeneniia plazmatrona dlia analiza titanovykh i aliumokal'tsievykh shlakov. Leningrad, 19[illegible]. 17 p. (MIRA 17:9)

DRUTSKAYA, I.V.; SHTIPEL'MAN, Zh.V.

Applicability of a plasmatron in analyzing some powdered materials.
Zhur. prikl. spekt. 2 no.3:267-269 Mr '65. (MIRA 18:6)

SHTIRKOV, D., inzh.

The hoisting and conveying machines. Mashinostroene 11 no.7/8:35-36 Jl-Ag '62.

SIMIDZHIEV, B., inzh.; SHTIRKOV, D., inzh.

Some new welding methods in the manufacture of electric trucks at the 6 Septemvri Electric Transport Plant of Sofia. Mashinostroene 12 no.4:42-43 Ap '63.

SEMKOV, Nikolai, inzh.; SHTIRKOV, Petur, inzh.; NESTOROVA, Penka, inzh.

Diagram and technological aspects of copper flotation in enriching lean copper ore from the "Madet" bed. Tekhnika Bulg 13 no.7:13-15, 33 '64.

SHTIRKOV, T

"Irrigation of pasture ground and natural meadows", p 31 (KOOPERATIVNO ZEMEDELIE, V 3 6 #3, Mar. 1951, Bulgaria)

SO: East European Vol 2 #8
Monthly List of Russian Accessions, Library of Congress, August 1953, Uncl.

ZHTIRKOV, T.

"Irrigation for Cultivated Agricultural Plants. p. 152." (KOOPERATIVNO ZEMEDELIE) Vol. [67], No. 5, May 1951, Sofiya, Bulgaria.

SO: Monthly List of East European Accessions L.C., Vol. 2,No. 11, Nov. 1953, Uncl.

GULOVETS, Yan, inzh.; SHTIRSKIY, PAVEL, inzh.

Use of analog computers in checking the stability of the parallel operation of superchargers. Energomashinostroenie 7 no.5:17-20 My '61. (MIRA 14:8)
(Superchargers)
(Electronic analog computers)

L 6767-65 EWT(m) DIAAP/AEDC(a)/AFWL/ASD(d)/SSD/ASD(a)-5/RAEM(t) IM

ACCESSION NR: AP4043984 S/0089/64/017/002/0097/0102

49
48

AUTHOR: Shtirskiy, Pavel

TITLE: Stability of the control circuit of a cold reactor

SOURCE: Atomnaya energiya, v. 17, no. 2, 1964, 97-102

TOPIC TAGS: reactor stability, reactor control, prompt nucleus, delayed neutrons, Laplace transformation, radioactive lifetime

ABSTRACT: The author analyzes the stability regions of the control system of a reactor of zero power.[19] The transfer function of the reaction kinetics (in the linear approximation) is given for m-groups of delayed neutrons in terms of the average lifetime of prompt neutrons and the contribution of groups of delayed neutrons, average lifetime of radioactive nuclei of the groups, and the constant of the Laplace transformation. The transfer function of the control system is expressed through an integration constant of the control system, the proportionality constant, and the time constant T. The analysis shows that for the stability,

Card 1/2

L 6767-65
ACCESSION NR: AP4043984

T must be as small as possible. Orig. art. has: 3 figures and 2 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut energetiki, ChSSR, Prague (Scientific Research Institute for Energy)

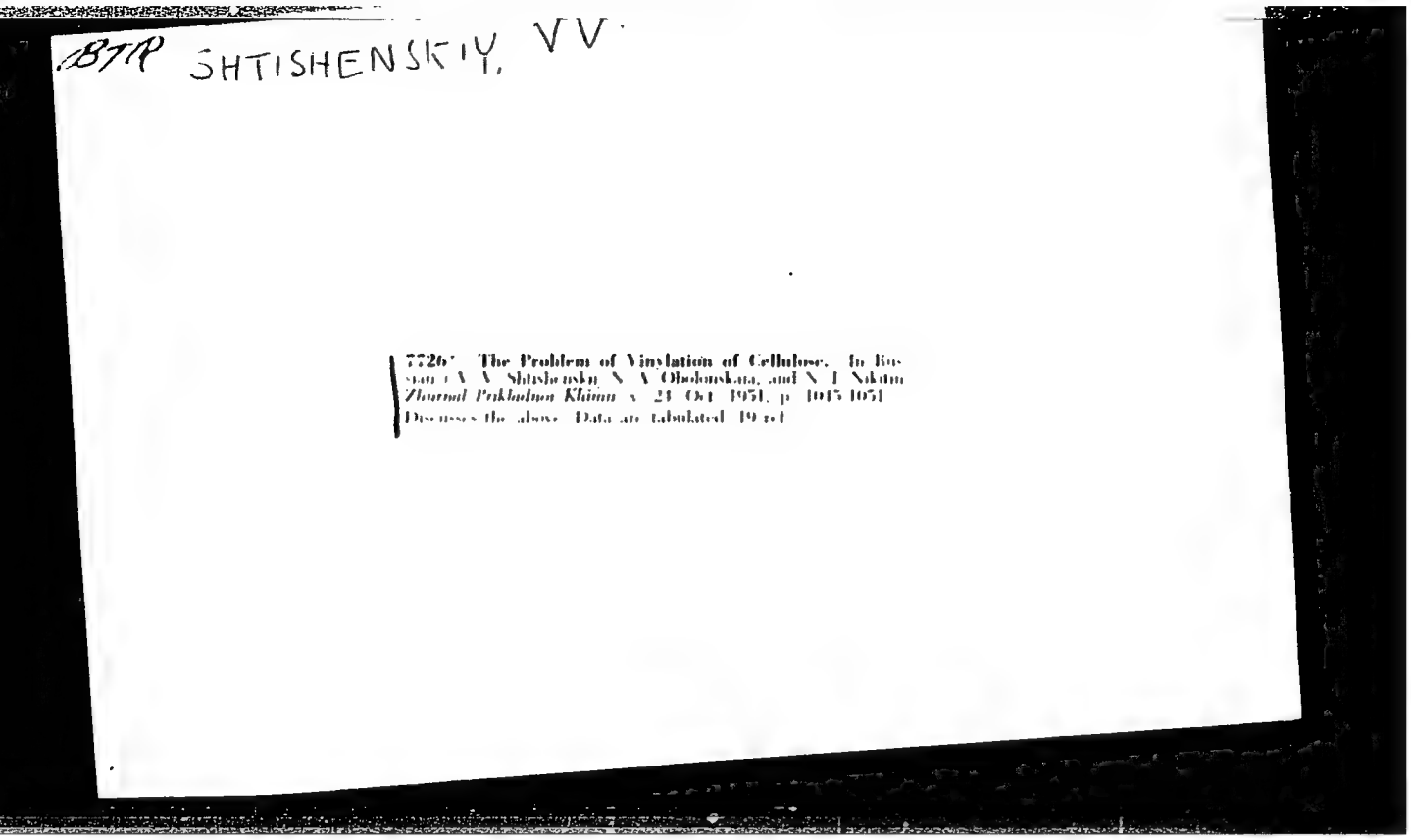
SUBMITTED: 04Jul63 DATE ACQ: 14Sep64 ENCL: 00

SUB CODE: PH NP NO REF SOV: 000 OTHER: 000

Card 2/2

VYSOKOVSKIY, S.N.; RAMEYEV, G.G.; MERKULOVA, R.M.; RYBIN, O.N.; LOGVINOV, L.M.; SHTIRTS, V.V.; POTAPOV, V.P.

Efficient rolling conditions and the introduction of strain gauges for controlling metal pressure on rolls. Biul. tekh.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekh. inform. 17 no.12:7-9 D '64. (MIRA 18:3)



BTP SHTISHENSKIY, VV

7726* The Problem of Vinylation of Cellulose. In Russian. V V Shtishenskiy, N A Obolenskaya, and N I Nikitin. *Zhurnal Prikladnoi Khimii*, v 24 Oct 1951, p 1045-1051

Discusses the above. Data are tabulated. 19 ref.

SADOVSKIY, V. D.; SHTSHEVSKAYA, N.V.

The Effect of the Cooling Rate on the Quantity of Residual Austenite

Trudy UFAN 9, 45, 1937

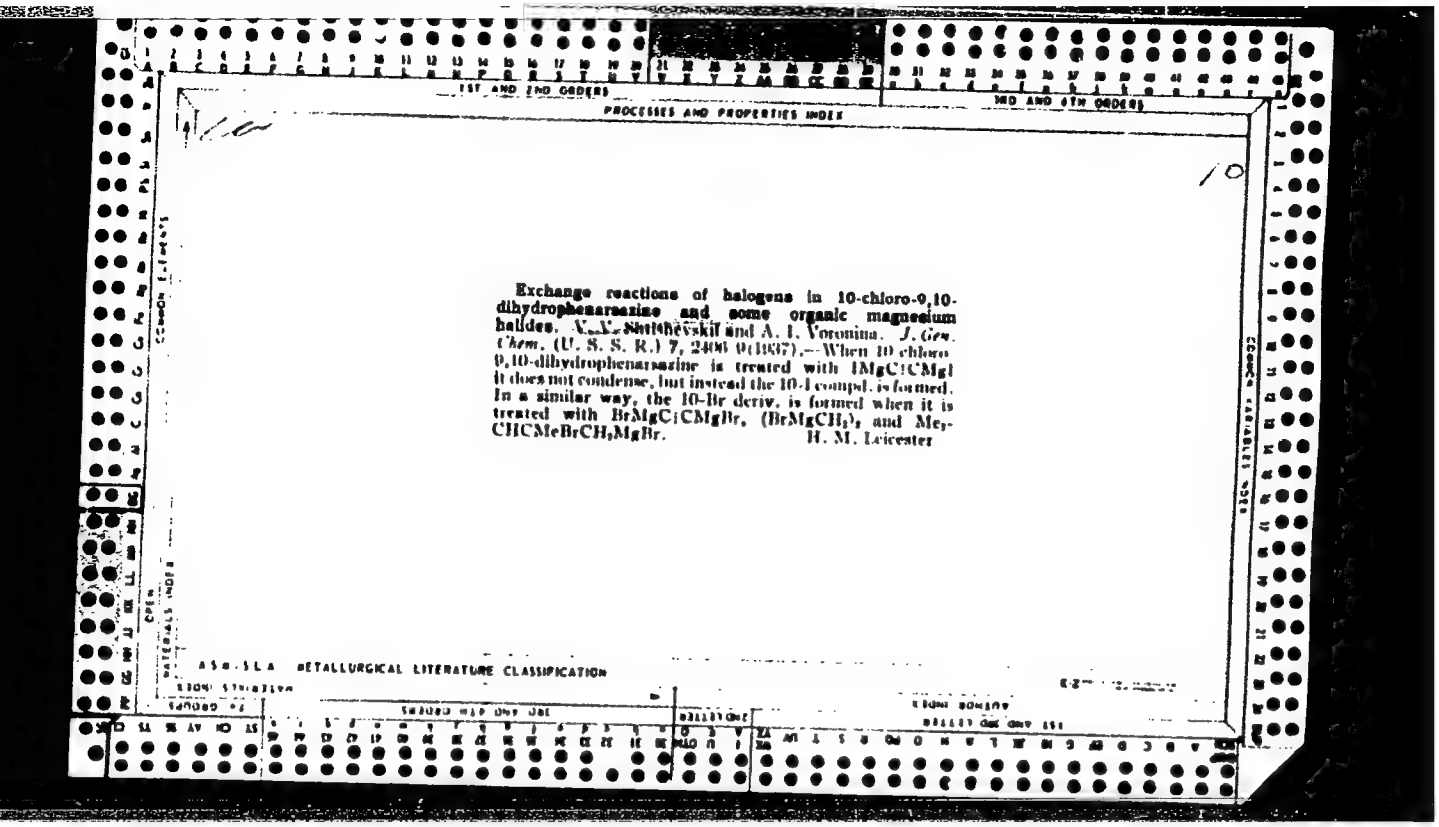
SHTISHEVSKIY, V.A., nauchnyy redaktor; UDOD, V.Ya., redaktor; TOKER, A.M., tekhnicheskiy redaktor.

Machinery and equipment for earthwork. Rats. i izobr. predl. v stroi. no.79:1-31 '54. (MIRA 8:4)
(Earthmoving machinery)

SHTISHEVSKIY, V.A., inzh.

Packing clayey soils. Biul. stroi. tekh. 12 no.4:12-15 Ap '55.
(MIRA 11:12)

1.TSentral'nyy institut informatsii po stroitel'stvu.
(Soil stabilization)



1ST AND 2ND ORDERS

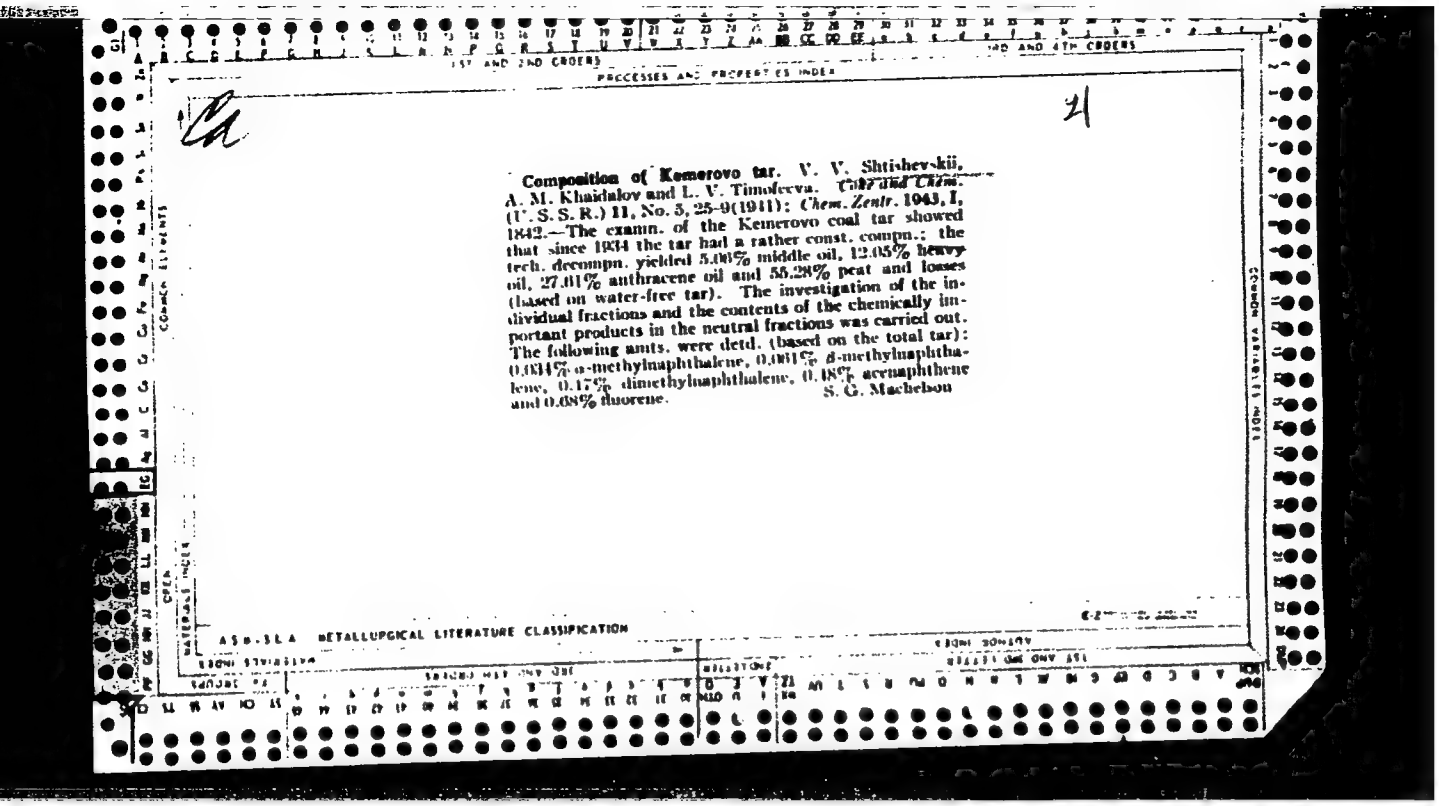
PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

10

Exchange reactions of halogens in 10-chloro-9,10-dihydrophenarsazine and some organic magnesium halides. V. V. Skitchevskii and A. I. Voronina. *J. Gen. Chem.* (U. S. S. R.) 7, 2406-9(1937).—When 10-chloro-9,10-dihydrophenarsazine is treated with IMgC:CMgI it does not condense, but instead the 10-I compd. is formed. In a similar way, the 10-Br deriv. is formed when it is treated with BrMgC:CMgBr, $(BrMgCH_2)_2$, and $Me_2CHCMeBrCH_2MgBr$.
H. M. Leicester

METALLURGICAL LITERATURE CLASSIFICATION



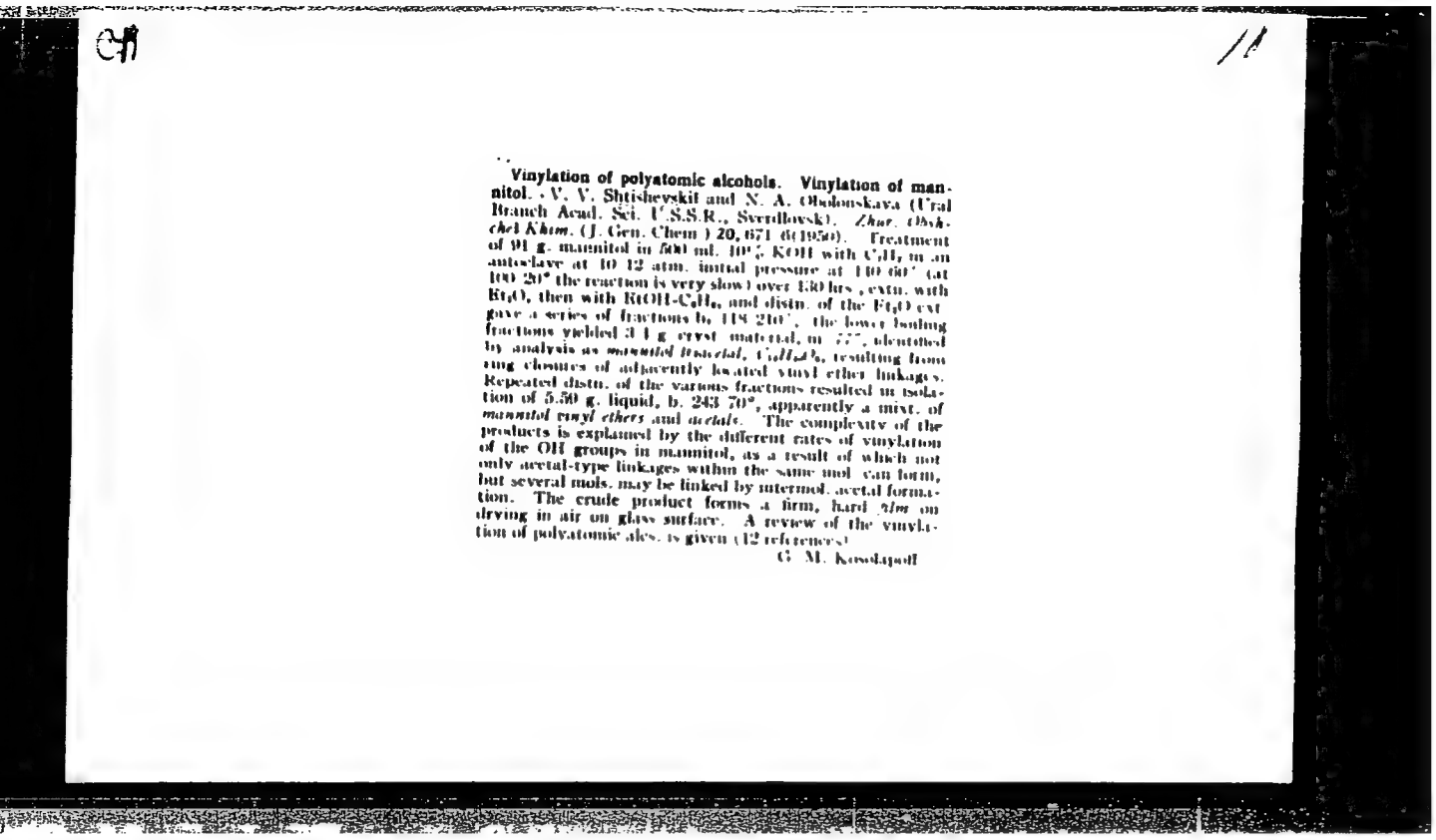
PROCESSES AND PROPERTIES INDEX

21

Composition of Kemerovo tar. V. V. Shtishev-skii, A. M. Khaidalov and L. V. Timofeeva. *Coke and Chem.* (U. S. S. R.) **11**, No. 5, 25-9(1941); *Chem. Zentr.* **1943**, I, 1842.—The examn. of the Kemerovo coal tar showed that since 1934 the tar had a rather const. compn.; the tech. decompn. yielded 5.06% middle oil, 12.05% heavy oil, 27.01% anthracene oil and 55.28% peat and losses (based on water-free tar). The investigation of the individual fractions and the contents of the chemically important products in the neutral fractions was carried out. The following amts. were dtrd. (based on the total tar): 0.034% α-methylnaphthalene, 0.081% β-methylnaphthalene, 0.17% dimethylnaphthalene, 0.18% acenaphthene and 0.08% fluorene.

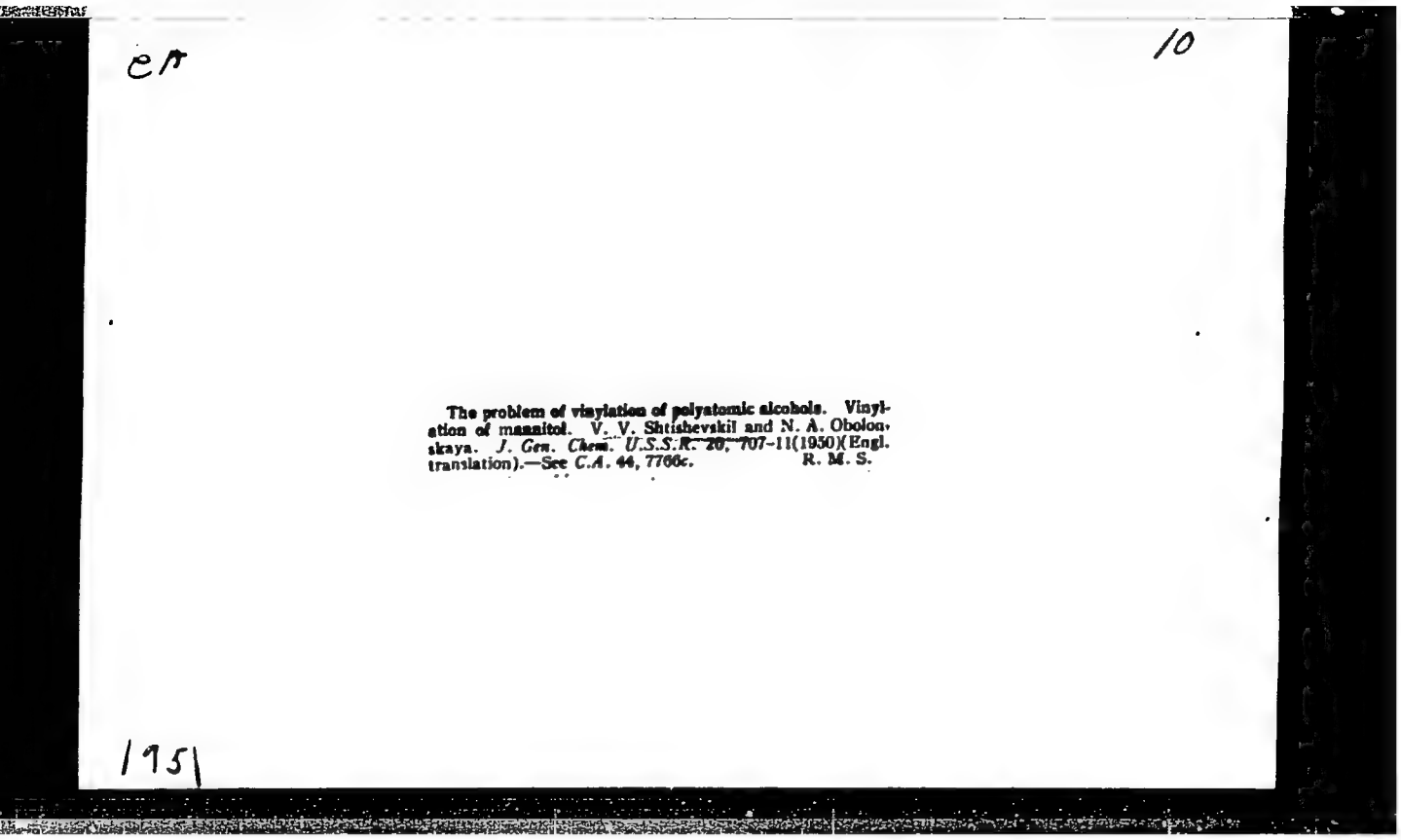
S. G. Machelson

METALLURGICAL LITERATURE CLASSIFICATION



Vinylation of polyatomic alcohols. Vinylation of mannitol. V. V. Shtishevskii and N. A. Obolonskaya (Ural Branch Acad. Sci. U.S.S.R., Sverdlovsk). *Zhur. Obshchei Khim.* (J. Gen. Chem.) **20**, 671–6 (1950). Treatment of 91 g. mannitol in 500 ml. 10% KOH with C_2H_2 in an autoclave at 10–12 atm. initial pressure at 140–60° (at 100–20° the reaction is very slow) over 130 hrs., extn. with Et_2O, then with EtOH-C_6H_6, and distn. of the Et_2O ext. gave a series of fractions b. 118–210°, the lower boiling fractions yielded 3.1 g. cryst. material, m. 77°, identified by analysis as *mannitol triacetal*, $C_{12}H_{20}O_6$, resulting from ring closures of adjacently located vinyl ether linkages. Repeated distn. of the various fractions resulted in isolation of 5.50 g. liquid, b. 243–70°, apparently a mixt. of *mannitol vinyl ethers* and *acetals*. The complexity of the products is explained by the different rates of vinylation of the OH groups in mannitol, as a result of which not only acetal-type linkages within the same mol. can form, but several mols. may be linked by intermol. acetal formation. The crude product forms a firm, hard *film* on drying in air on glass surface. A review of the vinylation of polyatomic alcs. is given (12 references).

G. M. Kosolapoff



eA

10

The problem of vinylation of polyatomic alcohols. Vinylation of mannitol. V. V. Shtishevskii and N. A. Obolonskaya. *J. Gen. Chem. U.S.S.R.* 20, 707–11(1950)(Engl. translation).—See *C.A.* 44, 7766c. R. M. S.

1951

SHTISHEVSKIY, V.V.

Oct 51

USSR/Chemistry - Plastics

"Vinylization of Cellulose," V.V. Shtishevskiy, N. A, Obolonskaya, N. I. Nikitin, Ural Affiliate Acad Sci USSR, Inst Chem and Metallurgy

"Zhur Prik Khim" Vol XXIV, No 10, pp 1045-1051

As a result of interaction of cellulose and acetylene in the presence of aqueous soln of KOH, products with the compn $2C_6H_{10}O_5.C_2H_2$ and $2C_6H_{10}O_5;3C_2H_2$ are obtained. Discusses possible structure of vinylization products obtained.

190T38

KURTSVAYL', G.I., inzh.; SHTITEL'MAN, D.I., inzh.

Increase of the power of a group of autotransformers. Elek. sta. 35 no.8:49-53 Ag '64. (MIRA 17:12)

SHTITEL'MAN, V.V.

Unit for making vertical exploratory boreholes of small cross-section. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 18 no.4:7-8 Ap '65. (MIRA 18:6)

SHTIVAL'MAN, A.L., inzh.

Mechanically cooled refrigerator cars used by United States Railroads.
Zhel.dor.transp. 42 no.10:82-85 O '60. (MIRA 13:10)
(United States--Refrigerator cars)

SHTIVEL', E.Ya.

Activity of lysozyme in saliva as an indicator of the general reactivity of the organism in acute medial otitis. Vest. oto-rin. 18 no.1:75 Ja-F '56. (MLRA 9:6)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta bolezney ukha, gorla i nosa (direktor dotsent A.P. Kolibaba), Khar'kov.
(EAR--DISEASES) (LYSOZYME)

MOSHKEVICH, S.M., kandidat meditsinskikh nauk.; SHTIVEL', E.Ya.,

Otogenous intracranial complications and the dynamics of lysozymo activities in saliva and blood as one of the indicators of the organism's reactivity. Vest. oto-rin. 18 no.1:77 Ja-F '56 (MIRA 9:6)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta bolezney ukha, gorla i nosa (direktor dotsent A.P. Kolibaba) Khar'kov.
(LYSOZYME) (EAR--DISEASES) (HEAD--DISEASES)

POLYANSKIY, N.G.; MARKEVICH, V.S.; SHTIVEL', N.Ye.

Determination of crotonylideneacetone and diacetone alcohol when present together. Zhur.anal.khim. 19 no.9:1132-1136 '64.
(MIRA 17:10)

1. Novokuybyshevsk Branch of Scientific-Research Institute of Synthetic Alcohols and Organic Products.

BESKROVNYY, L.D., inzh.; KORSAKOVA, T.M., inzh.; LEBEDEV, N.V., inzh.; PETROVA, Ye.P., inzh.; RUTKOVSKAYA, R.F., inzh.; FIGMAN, G.Ya., inzh.; SHTIVEL', O.B., inzh.; ISEYEVA, R.Kh., red.izd-va; SALAZKOV, N.P., tekhn. red.

[City streets and roads; their construction] Gorodskie ulitsy i dorogi; konstruktsii. Moskva, Izd-vo M-va kommun.khoz. RSFSR, 1963. 25 p. (MIRA 16:8)

1. Russia (1917- R.S.F.S.R.) Upravleniye blagoustroistva gorodov RSFSR.

(Streets) (Road construction)

SHTIVEL', E. A.

25233. SHTIVEL', E. A. Sero-Allergicheskie Reaktsii PRI Brutselleze. Sov. Meditsina, 1949, No. 8. S. 36.

SO: Letopis' No. 33, 1949

SHTIVEL' Ye.A

Treatment of amyloid-lipoid nephrosis. Sov.med. 19 no.6:58-59 Je '55. (MLRA 8:9)

1. Iz kliniki infektsionnykh bolezney (zav.prof. Sh.S. Khalfen) Azerbaydzhanskogo instituta usovershenstvovaniya vrachey (dir. M.I. Aliyev)

(NEPHROSIS,
lipoid, ther.)

SHTIVEL', Ye.A., dotsent

Clinical aspects of amyloidosis. Klin.med. 35[i.e.34] no.1 Supplement: 22 Ja '57. (MIRA 11:2)

1. Iz kliniki infektsionnykh bolezney (zav. - prof. Sh.S.Khalfen) Azerbaydzhanskogo instituta usovershenstvovaniya vrachey (dir. M.I. Aliyev.

(AMYLOIDOSIS)

KHALFEN, Sh.S., prof.; SHAKOV, I.I.; SHTIVEL', Ye.A.; PAKUSINA, O.V.; FILIMONOVA, V.A. (Baku)

Pneumonia in influenza during the 1957 pandemic [with summary in English]. Terap.arkh. 31, no.1:77-82 Ja '59. (MIRA 12:2)

1. Iz infektsionnoy kliniki i kafedry rentgenologii Azerbaydzhanskogo instituta usovershenstvovaniya vrachey.
(INFLUENZA, compl.
pneumonia (Rus))
(PNEUMONIA, etiol. & pathogen.
influenza (Rus))

SHTIVEL', Ye.Ya.

Relation of certain otorhinolaryngological diseases to viral influenza. Vest. otorinolar., Moskva 15 no.2:21-23 Mar-Apr 1953. (CLML 24:3)

1. Of the Ukrainian Scientific-Research Institute for Diseases of the Ear, Throat, and Nose (Director -- Candidate Medical Sciences A. P. Kolibaba).

SHIRINENKO, K., polkovnik; SHTIVEL'BAND, M., polkovnik; RAFFE, Ye., polkovnik.

Electric case with sand. Voen.vest. 36 no.11:43-46 N '56. (MLRA 10:2)

(Sand tables (Military science))

SHTIVEL'BERG, A.S.

In Odessa enterprises. Leg.prom. 18 no.12:41-42 D '58.
(MIRA 11:12)

(Odessa--Industrial management)

B006/-

AUTHOR: Shtivel'man, K. Ya.

TITLE: On the Energy Spectrum of the Holes in Crystals of the Diamond Type

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 3, pp. 499-501

TEXT: The present paper gives the results of computations of the energy spectra of p-type germanium and p-type silicon; a method is employed, which is described in Ref. 1. In contrast to Ref. 1, the spin-orbit interaction is also taken into consideration. The results are applied to three special cases: 1) for very small k ($\vec{k}$ is the quasi-momentum); 2) for high k; 3) for medium k. The results indicate that the band of heavy holes E_1' shows only slight changes when removing from the maximum (which is at $\vec{k} = 0$). Only the character of anisotropy changes a little, whereas the effective mass of the heavy holes remains practically constant. The light hole band E_2', however, strongly changes its shape with increasing k: the effective mass of the "light" holes approaches that of the "heavy" holes. With increasing k the effective hole mass in the E_3' band split by spin-

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SHTIVEL'MAN, K.Ya.

Energy spectrum of holes in diamond-type crystals. Fiz. tver. tela 2 no.4:644-650 Ap '60. (MIRA 13:10)

1. Institut poluprovodnikov AN SSSR, Leningrad.
(Lattice theory)

S/181/63/005/001/054/064
B104/B166

AUTHOR: Shtivel'man, K. Ya.

TITLE: Effective masses of holes in silicon and germanium

PERIODICAL: Fizika tverdogo tela, v. 5, no. 1, 1963, 348-350

TEXT: The valence bands of diamond-type crystals can be found by solving a cubic equation (E. O. Kane, J. Phys. Chem. Sol., 1, 82, 1956; K. Ya. Shtivel'man, FTT, 2, 499, 1960; FTT, 2, 644, 1960). Here the results of studying solutions to this secular equation are given. Proceeding from the system

$$ak^6 + 2bk^4\left(\varepsilon - \frac{1}{3}\Delta\right) + 12Ak^2\left(\varepsilon - \frac{2}{3}\Delta\right) + 8\varepsilon^2(\varepsilon - \Delta) = 0; \quad (1)$$

$$a = (A + 2B)(A - B)^2 - (A - B)(N^2 - 9B^2)\xi + (N - 3B)^2(2N + 3B)\eta; \quad (2)$$

$$b = 3(A^2 - B^2) - (N^2 - 9B^2)\xi; \quad (3)$$

$$\xi = \frac{k_x^2k_y^2 + k_y^2k_z^2 + k_z^2k_x^2}{k^4}; \quad \eta = \frac{k_x^2k_y^2k_z^2}{k^6}. \quad (4)$$

Card 1/3

Effective masses of holes in...

where $\vec{k}$ is the hole wave vector, ε is the hole energy, Δ is the spin-orbit splitting of the valence bands, and A, B, N are parameters of the cyclotron resonance, determining the effective mass of the holes,

$$-\frac{1}{m_{1,2}}=(A-B)-(N-3B)\left(\xi\pm\sqrt{\xi^2-3\eta}\right);$$
$$-\frac{1}{m_3}=(A+2B)+2(N-3B)\xi. \qquad (6)$$

is obtained for the hole masses in the three valence bands at high temperatures ($\varepsilon \gg \Delta$, $a<0$). These relations are exact for the directions [100], [110], and [111], and may be interpolated for other directions of the hole wave vectors. The hole masses in the three valence bands do not depend on energy but differ from the hole masses at $\varepsilon = \Delta$ and $\varepsilon \ll \Delta$. From the conditions that the hole masses are always positive, and that $a<0$, the restrictions

$$A<0; \qquad (7)$$
$$|B|\leqslant\frac{1}{3}|N|<|A|; \quad B<\frac{1}{2}|A|; \quad \frac{1}{3}N<\frac{1}{2}|A|; \qquad (8)$$
$$|N|<|2A+B|. \qquad (9)$$

Card 2/3